

LISTING OF CLAIMS:

The following listing of claims replaces all previous versions and listings.

1. (Currently amended) A linear electric machine comprising:

a plurality of pairs of teeth circumferentially disposed such that respective surfaces of the plurality of pairs of teeth surround a space;

a yoke disposed around the teeth and magnetically connected to the teeth;

a plurality of coils mounted on the teeth; and

a movable core disposed in the space opposite the teeth to reciprocate transversely to the teeth, said movable core having a plurality of first permanent magnets and a plurality of magnetic inductors disposed to face the teeth at axially opposite ends for providing a respective plurality of pairs of magnetic poles on a peripheral surface of each end thereof to face the surfaces of the teeth and a magnet shielding plate disposed at axially middle portion thereof to magnetically separate the permanent magnets disposed at one end thereof from the permanent magnets disposed at the other end thereof

wherein:

said first permanent magnets are disposed around a center axis of said movable core between the magnetic inductors and polarized in directions perpendicular to radial directions of said movable core to polarize said magnetic inductors.

2. (Canceled)

3. (Currently amended) The linear electric machine as claimed in claim 21,
wherein said magnetic teeth extend perpendicularly to the axial direction of said movable core.

4. (Currently amended) The linear electric machine as claimed in claim 21,
wherein said ~~magnetically~~magnetic shielding ~~means~~plate is made of a non-magnetic material.

5. (Currently amended) The linear electric machine as claimed in claim 21,
wherein said ~~magnetically~~magnetic shielding ~~means~~plate comprises a permanent magnet plate that has a plurality of pairs of magnetic poles that are opposite in polarity of the magnetic poles of the first permanent magnets adjacent thereto.

6. – 7. (Canceled)

8. (Currently amended) The linear electric machine as claimed in claim 71,
wherein said first permanent magnets project from said inductors to be located between the adjacent teeth.

9. (Canceled)

10. (Currently amended) The linear electric machine as claimed in claim 21,
wherein said coils are connected to an ac power source to reciprocate said movable core.

11. (Currently amended) The linear electric machine as claimed in claim 21,
wherein said movable core is connected to means for reciprocating to generate electric
power at the coils.